

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/774,472	02/10/2004	Yoshiaki Tatsumi	101160-00026	9149	
4372	7590 01/10/2006		EXAMINER		
ARENT FOX PLLC 1050 CONNECTICUT AVENUE, N.W.			TRAN, THAO T		
SUITE 400	ECTICUT AVENUE, N. W.	•	ART UNIT	PAPER NUMBER	
WASHINGT	WASHINGTON, DC 20036			1711	
				_	

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

N
, -

	Application No.	Applicant(s)			
	10/774,472	TATSUMI ET AL.			
Office Action Summary	Examiner	Art Unit			
	Thao T. Tran	1711			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be time rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	l. ely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 10/18	<u>8/05,8/12/05,7/15/05</u> .				
2a)⊠ This action is FINAL . 2b)□ This	action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims					
 4) Claim(s) 1-19 is/are pending in the application. 4a) Of the above claim(s) 7-9 and 12-17 is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1,2,5,6,10,11,18 and 19 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 					
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Examine 10.	epted or b) objected to by the Edrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 09/925,739. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s)					
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)					
Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 6/17/05. Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152) 6) Other:					
S. Patent and Trademark Office					

Application/Control Number: 10/774,472 Page 2

Art Unit: 1711

DETAILED ACTION

Response to Amendment

- 1. This is in response to the Amendments filed on 7/15/2005 and 8/12/2005. The Affidavit filed on 10/18/2005 is also acknowledged.
- 2. Claims 1-2 and 5-19 are currently pending in this application. Claims 3-4 have been canceled. Claims 18-19 have been newly added. Claims 1-2 and 10-11 have been amended. Claims 7-9, 12-17 have been withdrawn as directed to a non-elected invention without traverse as indicated in the Reply filed on 11/03/2004.

Claim Rejections - 35 USC § 112

3. In view of the prior Office action of 1/25/2005, the rejection of claims 1-6 and 10-11 under 35 U.S.C. 112, second paragraph, has been withdrawn due to the Amendments made thereto.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Application/Control Number: 10/774,472 Page 3

Art Unit: 1711

5. Claims 1-2, 5-6, and 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen et al. (US Pat. 5,691,876).

Chen teaches an electrostatic chucking device having a laminate structure; wherein the laminate comprises in sequence of a substrate 110, a first polymeric dielectric layer 124, a conductive layer 122 (electrode layer), and a second polymeric dielectric layer 114 (see abstract; Fig. 1; col. 6, ln. 35-43).

The dielectric layer 124 comprises a non-thermoplastic polyimide core layer, and two thermoplastic polyimide adhesive layers to adhere the dielectric layer to the substrate and the conductive layer. The dielectric layer 114 comprises a non-thermoplastic polyimide layer and a thermoplastic polyimide adhesive layer adhering to the conductive layer (see paragraph bridging col. 7-8; col. 9, ln. 38-67; col. 10, ln. 1-5).

The thermoplastic polyimide adhesive layer can be 38.1 microns in thickness (see col. 9, ln. 38-40, 65-67), which reads on the instantly claimed ranges. The substrate is made of aluminum alloy (see col. 5, ln. 31-32).

With respect to the temperature at which the adhesive film is subjected for compression bonding, it has been within the skill in the art that how bonding occurs between layers would have no significant patentable weight in an article claim.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. as applied to claims 1 and 2 above.

Chen is as set forth in claims 1-2 above and incorporated herein.

Chen does not teach the use of a siloxane-modified polyimide in the adhesive layer in the same embodiment. However, in another embodiment, Chen teaches the use of a siloxane-modified polyimide layer as the adhesive layer to provide excellent adhesion of the polyimide to the metal surface (see paragraph bridging col. 10-11).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have employed the siloxane-modified polyimide in the adhesive layer of the first embodiment of Chen for the purpose of improving adhesion of the polyimide layer to the substrate and the conductive layer.

Response to Arguments

8. Applicant's arguments filed on 7/15/2005 and 8/17/2005 have been fully considered but they are not persuasive.

Throughout the Remarks, Applicants contend that Chen '876 differs from the presently claimed invention in that the reference does not teach a compression bonding process at a temperature of the presently recited range. However, it has been within the skill in the art that only structural elements, and not process limitations, would impart patentability to an article claim. And since Chen teaches all the layers as presently recited, Chen anticipates the presently claimed invention.

Application/Control Number: 10/774,472

Art Unit: 1711

The Affidavit filed on 10/18/2005 presents Examples of Espanex to illustrate the difference between Espanex and the thermoplastic polyimide Kapton used in Chen '876. However, since Espanex is a specific polyimide, the data presented in the Affidavit is not commensurate with the scope of the claims.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 9:00 a.m. - 5:30 p.m..

Application/Control Number: 10/774,472

Art Unit: 1711

Page 6

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tt

January 6, 2006

THAO T. TRAN
PATENT EXAMINER

Than Tran